IN THE SPECIFICATION

On th first page of the specification between th heading and the first paragraph, please enter the following heading and paragraph:

Related Application

This application is a divisional application of application serial no. 10/246,693, filed September 19, 2002, which is a divisional application of application serial no. 09/750,691, filed January 2, 2001, now abandoned, which is a divisional of application serial no. 09/212/596, filed December 16, 1998, and now abandoned, which is a divisional application of application serial no. 08/591,731, filed January 25, 1996, now U.S. Patent No. 5,915,270, issued June 22, 1999, which in turn is a continuation application of application serial no. 08/232,055, filed June 15, 1994, now abandoned, which in turn is a 371 of PCT/CH/92/00173, filed August 27, 1992.

Page 1, below the aforementioned insert amend the first paragraph to read as follows with the indicated headings before and after the paragraph:

Field of the Invention

This invention pertains to a method [as described in the preamble to claim 1, uses this method according to claim 9 or 10, a testing device as described in the preamble to claim 11, and use of said device according to claim 19] and a testing device for testing a container in which a pressure differential is created between a pressure inside the container and a pressure in its environment and from the behavior of one of the pressures, it is established whether the container satisfies predetermined test conditions. The method and testing device are particularly suited

to testing the gas tightness of containers.

Between lines 6 and 7 insert the following:

Background and Summary of the Invention

Page 2, delete the third paragraph and insert the following:

The goal set for the present invention is to simplify this known method significantly. The method of the invention and the corresponding arrangement as described herein are exceptionally well suited for accomplishing this goal. More particularly, according to the method of the invention for testing containers in which a pressure differential is created between a pressure inside the container and a pressure in its environment and from the behavior of one of the pressures, it is established whether the container satisfies predetermined test conditions, after one of the pressures reaches a predetermined test value or after it has reached a maximum value and said value has been stored, subsequently said pressure is compared for a predetermined time to at least one value of one of the two pressures, in which case at least this one pressure value appears as an output signal of a pressure sensor. The method is especially useful for testing the gas tightness of the containers.

A test arrangement according to the invention for testing containers comprises a pressure or suction source, which can be effectively connected to a container to be tested with respect to its interior and exterior pressure, at least one pressure sensor and a pressure storage arrangement, wherein the pressure sensor is a converter

that converts an input-side pressure value into an output-side electrical signal and the output of the sensor, on the one hand, and the output of an electronic pressure-value storage arrangement, on the other, are fed to a comparator unit.

Page 2, delete the fifth paragraph and insert the following:

The method of the invention is implemented in a configuration wherein an electrical output signal of the sensor is compared to one or more predetermined values, e.g., on a computer into which the sensor output is entered. A value of the sensor output signal is stored as a pressure value. Either the pressure in the interior of the container or that in the environment of the container is increased or decreased, and a value of the pressure in the container or in the environment of the container is measured.

Page 3, delete the first paragraph and insert the following:

The preferable procedure is that both the source connection to admit the pressure medium or to ensure suction and the sensor input are hooked up to either the interior of the container or the container's environment.

Page 4, delete the second, third and fourth paragraphs and insert the following:

Storage, wherein the pressure in the environment of the container is increased or decreased and a value of the pressure of the environment of the container is measured, is preferably undertaken in such a way that, with control at a

predetermined time, an analog/digital converter is enabled to convert the sensor output signal, and the then stationary output signal of this analog/digital converter is used as a reference value for the subsequent analysis of the sensor output signal. In this process, either another analog/digital converter can be installed behind the sensor output and the output signal of the latter converter can then be digitally compared to that of the storage unit A/D converter or, preferably, a D/A converter is placed immediately behind the storage A/D converter and thus the stored, re-converted signal is fed as an analog reference signal to an analog comparator unit, to which the output signal of the sensor is also fed directly.

In addition, wherein the pressure in the environment of the container is increased or decreased and a value of the pressure of the environment is measured, a null balance is preferably undertaken by determining, essentially during the value storage process at the comparator, whether an output signal of the device encompasses the null value, at least approximately; if a signal appears that deviates from the null value or from a predetermined minimum value, then said signal is used as a null-balance signal.

Preferred embodiments of the test arrangement of the invention for testing containers comprise a pressure or suction source which can be effectively connected to a container to be tested with respect to its interior and exterior pressure, at least one pressure sensor, an electronic pressure-value storage arrangement and a comparator unit. The pressure sensor is a converter that converts an input-side pressure value into an output-side electrical signal. Means are provided for feeding the output of the sensor, on one hand, and the output of the electronic pressure-

value storage arrangement, on the other to the comparator unit to commence a measuring test interval at a point in time immediately after the input-side pressure value of the sensor reaches risingly a predetermined test value and rereaches the predetermined test value diminishingly.

Page 5, line 3, delete "Here" and insert the title as follows:

Brief Description of the Drawings

after line 17, insert the title as follows:

Detailed Description of Disclosed Embodiments

Page 6, delete the third paragraph and insert the following:

If leaks are present in container 1, after reference value $e1_0$ is stored as mentioned, signal value e1 will vary depending on the direction of the pressure gradient across the container wall; the higher the rate of variation, the larger the leak. On the output side of comparator 15 there will be an output signal. The value of this output signal is a function of the change in pressure in chamber 3 from the reference pressure associated with the stored pressure reference value $e1_0$.

Page 9, delete the second full paragraph and insert the following:

To store value $e1_0$ as shown in Fig. 1, from timing signal generator 29, at measurement point t_1 in Fig. 6 after the pressure reaches risingly a predetermined test value 1 and rereaches the predetermined test value diminishingly as shown in

Fig. 6, a conversion cycle at converter unit 21 is enabled, at which point signal value el_0 appears at the input of differential amplifier unit 23. At essentially the same time, timing signal generator 29 preferably actuates storage unit 27, causing the output signal value of amplifier 25 to be fed back as a null-value-balance signal to the amplifier input. If when value $e1_0$ was stored the output signal of amplifier 25 was not equal to zero, then this signal value is used as a null compensation signal via storage unit 27. By nulling the signal from amplifier stage 25 at time t_1 in Fig. 6, the output signal from amplifier stage 25 from time t_1 over the measuring time interval from t_1 to t_2 will be a function of the change in pressure in chamber 3 from the reference pressure associated with the stored value $e1_0$ at time t_1. Thus, the arrangement permits the direct measurement of the change in pressure in the chamber during the measuring time interval t_1-t_2 using pressure sensor 11, without the need for use of a reference pressure chamber or a differential pressure sensor as in the prior art.